

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-20. (Cancelled)

21. (Currently Amended) A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web being saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 80 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, wherein said polymer-impregnated paper-based web [[has]] exhibits a percent bacterial filtration efficiency of at least about 95%.

22. (Previously Presented) The medical packaging substrate of claim 21, wherein said polymer emulsion has a glass transition temperature of about -29°C or less.

23. (Previously Presented) The medical packaging substrate of claim 21, wherein said polymer emulsion has a glass transition temperature of about -43°C or less.

24. (Previously Presented) The medical packaging substrate of claim 21, wherein said polymer emulsion has a glass transition temperature of about -60°C or less.

25. (Previously Presented) The medical packaging substrate of claim 21, wherein said saturant is present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web.

26. (Previously Presented) The medical packaging substrate of claim 21, wherein said saturant is present at an add-on level of from about 20 to about 60 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web.

27. (Previously Presented) The medical packaging substrate of claim 21, wherein said saturant is present at an add-on level of from about 30 to about 50 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web.

28. (Previously Presented) The medical packaging substrate of claim 21, wherein said polymer emulsion comprises from about 60 to about 100 percent, on a dry weight basis, of said saturant.

29. (Previously Presented) The medical packaging substrate of claim 21, wherein said polymer emulsion comprises a polyacrylate.

30. (Previously Presented) The medical packaging substrate of claim 21, wherein said polymer emulsion comprises a blend of a polyacrylate and a polymer that is not a polyacrylate.

31. (Previously Presented) The medical packaging substrate of claim 21, wherein said saturant comprises an additional polymer emulsion.

32. (Previously Presented) The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of -20°C or less.

33. (Previously Presented) The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of about -29°C or less.

34. (Previously Presented) The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of about -43°C or less.

35. (Previously Presented) The medical packaging substrate of claim 31, wherein said additional polymer emulsion has a glass transition temperature of about -60°C or less.

36. (Currently Amended) A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web having a Gurley Hill porosity of greater than about 15 sec/100 cc, said polymer-impregnated paper-based web being saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, and wherein said polymer-impregnated paper-based web exhibits a [[%BFE]] percent bacterial filtration efficiency of at least about 95%.

37. (Currently Amended) A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web having a Gurley Hill porosity of greater than about 15 sec/100 cc, said polymer-impregnated paper-based web being saturated with a saturant comprising a polymer emulsion having a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, and wherein said polymer-impregnated paper-based web exhibits a [[%BFE]] percent bacterial filtration efficiency of at least about 98%.

38. (Currently Amended) A medical packaging substrate according to claim 37, wherein said polymer-impregnated paper-based web exhibits a [[%BFE]] percent bacterial filtration efficiency of at least about 99%.

39. (Currently Amended) A medical packaging substrate comprising a polymer-impregnated paper-based web, said polymer-impregnated paper-based web having a Gurley Hill porosity of greater than about 15 sec/100 cc, said polymer-impregnated paper-based web being saturated with a saturant comprising at least two polymer emulsions, wherein at least one of said polymer emulsions has a glass transition temperature of -20°C or less, said saturant being present at an add-on level of from about 20 to about 70 dry parts per 100 dry parts of fiber in said polymer-impregnated paper-based web, and wherein said polymer-impregnated paper-based web exhibits a [[%BFE]] percent bacterial filtration efficiency of at least about 98%.

40. (Previously Presented) The medical packaging substrate of claim 39, wherein one of said at least two polymer emulsions has a glass transition temperature of about -43°C or less.

41. (Previously Presented) The medical packaging substrate of claim 40, wherein both of said at least two polymer emulsions have a glass transition temperature of about -43°C or less.